

SEQUENCE LISTING

<110> UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.

<120> STABILIZED BIOACTIVE PEPTIDES AND METHODS OF
IDENTIFICATION, SYNTHESIS AND USE

<130> 235.00010201

<140> Unassigned

<141> 1999-10-12

<150> 60/104,013

<151> 1998-10-13

<150> 60/112,150

<151> 1998-12-14

<160> 110

<170> PatentIn Ver. 2.0

<210> 1

<211> 133

<212> DNA

<213> Escherichia coli

<400> 1

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ggcagtgcgc gcaacgcaat taatgtgagt tagctcactc attaggcacc ccaggcttta 60
cactttatgc ttccggetcg tatgttgtgt ggaattgtga gcggataaca atttcacaca 120
ggaaacagct atg                                     133

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<210> 2

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: peptide
having opposite charge ending motif

<400> 2

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Met Glu Asp Glu Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1             5             10             15

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Xaa Xaa Xaa Xaa Xaa Arg Lys Arg Lys
      20             25

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<210> 3

<211> 14

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: stabilized
angiotensin

<400> 3

Pro Pro Asp Arg Val Tyr Ile His Pro Phe His Ile Pro Pro
1 5 10

<210> 4

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
angiotensin

<400> 4

Glu Asp Glu Asp Asp Arg Val Tyr Ile His Pro Phe His Ile Arg Lys
1 5 10 15

Arg Lys

<210> 5

<211> 10

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<213> Homo sapiens

<400> 5

Asp Arg Val Tyr Ile His Pro Phe His Ile
1 5 10

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<213> Description of Artificial Sequence: primer

<400> 6

gttgccattg ctccaggcat

<210> 7

<211> 42

<212> DNA

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<223> Description of Artificial Sequence: primer

<400> 7

gttgattcca taagatcttc cctgtgtgaa attgtttacc gc

42

<210> 8

<211> 37

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

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attgaattca ccattggacac catcgaatgg tgcaaaa

37

<210> 9

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 9

attgttgcca ttgctgag

19

<210> 10

<211> 43

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 10

tgtatgaatt ccagggtacc atggttgaaag accaaagggc ctc

43

<210> 11

<211> 36

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 11

tactatagat ctatgacct gattacggat tcaactg

36

<210> 12

<211> 36

<212> DNA

<213> Artificial Sequence

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tacataaagg ttggcctgcc cggttattat tatTTT

36

<210> 13

<211> 47

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 13

tatcatctgc agaggaaaaca gctatgacca tgattacgga ttcactg

47

<210> 14

<211> 47

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 14

tacatactcg agcaggaaag cttggcctgc cgggttatta ttatTTT

47

<210> 15

<211> 47

<212> DNA

<210> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 15

tatcatggat ccaggaaaca gctatgacca tctattaaga ttccatg

47

<210> 16

<211> 36

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 16

tactatagat ctatggctat ccaggaaaac aaacag

35

<210> 17

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 17

acatataagt ttttaaaaat ctccgttagt ttctgctacg

40

<210> 18

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 18

tactatagat ctatgaacaa aggtgtaatg ccacc

35

<210> 19

<211> 35

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 19

atgagtaaat tggacaataa tctgaataaa ctgcgt

31

<210> 20

<211> 15

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer
fragment

<400> 20

agatcttatg aattc

15

<210> 21

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer
fragment

<400> 21

agatcttatg aattc

15

<210> 22

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer
fragment

<400> 22

agatcttatg aattc

15

<210> 23

<211> 93

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: randomized
oligonucleotide

<400> 23

tactatagat ctatggnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn 10
nnnnnnnn nnnnnnnnn gtaattctcg gca 20

<210> 14

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 24

ttctgagaat tcttatta 10

<210> 25

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 25

tcattaatgc agctggcacg 20

<210> 16

<211> 10

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 16

ttcctatcacg gtgcctgact 20

<210> 17

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 27

tactcactc attaggtacc 20

<210> 28

<211> 28

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 28

atgacgatg aggcattgt

28

<210> 29

<211> 92

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense
oligonucleotide

<400> 29

tactatagat ctacggtcac tgaattttgt ggcttggtgg accaactgcc ttagtaatag 60
tggagagctg aaattaataa gaattctcga ca 92

<210> 30

<211> 91

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense
oligonucleotide

<400> 30

tactatagat ctacgtggcg ggactcatgg attaagggtg gggacgtggg gtttatgggt 60
taaaatagtt tgataataag aattctcgac a 91

<210> 31

<211> 92

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense
oligonucleotide

<400> 31

tactatagat ctargaacgg cagaaccata cgaatccggg acataccagc agcatuata 60
 gctaccacot gggtaataa gaattctcga ca 91

<210> 31

<211> 93

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: antisense
 oligonucleotide

<400> 31

tactatagat ctacggacccg tgaagtcatg tctgcccga aacagggaatg gaaggaaaga 60
 acgtatagg cgggtaata agaattctcg aca 93

<210> 33

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense
 oligonucleotide

<400> 33

tactatagat ctacgagggg cgccaactaa ggggggggga aggtatttgt cccgtgcata 60
 atctgggtg ttgtataata agaattctcg aca 93

<210> 34

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
 peptide

<400> 34

Met Val Thr Glu Phe Cys Gly Leu Leu Asp Gln Leu Pro
 1 5 10

<210> 35

<211> 86

<212> DNA

<213> Artificial Sequence

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<213> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 35

caggaaagat ctatggtcaa tgaattttat aggtttgttg accaaatgac tagtaataag 60
tggaagpctg aaattaataa gaattc 80

<210> 36

<211> 16

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: stabilized
peptide

<400> 36

Met Trp Arg Asp Ser Trp Ile Lys Gly Arg Asp Val Gly Phe Met Gly
1 5 10 15

<210> 37

<211> 85

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 37

caggaaadat ctatgtgggg ggaactatgg attaagggta gggacgtggg gtttatgggt 60
taaaatagtt tgataataag aattc 85

<210> 38

<211> 141

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 38

caggaaagat ctatgtcagg ggcacatgtg accaggggact gcaagtggg gttgtccaat 60
cgttggtat acgtaataag aattctcag tttagacagc tatcatogat aagctttaat 120
gaggtagttt atracagtta a 141

<210> 39
 <211> 41
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: stabilized
 peptide

<400> 39
 Met Ser Gly Gly His Val Thr Arg Glu Cys Lys Ser Ala Met Ser Asn
 1 5 10 15
 Arg Trp Ile Tyr Val Ile Arg Ile Leu Met Phe Asp Ser Leu Ser Ser
 20 25 30
 Ile Ser Phe Asn Ala Val Val Tyr His Ser
 35 40

<210> 40
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: stabilized
 peptide

<400> 40
 Met Tyr Leu Phe Ile Gly
 1 5

<210> 41
 <211> 75
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: nucleic acid
 encoding stabilized peptide

<400> 41
 caggaaagat ctaagtattt gttcatcgga taatacttaa tggatcggtg gagaacttaa 60
 gtttaataag attc 75

<210> 40

<211> 87

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 41

caggaaagat ctatgcttct atttgggggg gactgggggc agaaagccgc atactttact 60
ctgcacgcgc caaggtaata agaattc 87

<210> 43

<211> 20

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: stabilized
peptide

<400> 43

Met	Leu	Leu	Phe	Gly	Gly	Asp	Cys	Gly	Lys	Ala	Gly	Tyr	Phe	Thr	Val
1				5				10					15		

Leu	Pro	Ser	Arg
			20

<210> 44

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 44

caggaaagat ctatgattgg gggatccttg agcttcgcct gggcaatagt ttgtaataag 60
aatttcacatg ttgga 75

<210> 45

<211> 20

<212> PRT

<213> Artificial Sequence

<120> 1

<123> Description of Artificial Sequence: stabilized
peptide

<400> 45

Met Ile Gly Gly Ser Leu Ser Phe Ala Trp Ala Ile Val Cys Asn Lys
1 5 10 15Asn Ser His Val
20

<110> 46

<111> 14

<112> PRT

<113> Artificial Sequence

<120>

<123> Description of Artificial Sequence: stabilized
peptide

<400> 46

Met Asn Gly Arg Thr Lys Arg Ile Arg Asp Pro Pro Ala Ala
1 5 10

<210> 47

<211> 86

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 47

caggaaagat ctatgaacgg cogaaccaa cgaatcoggy acccaccaga cgcctaaaca 60
gctaccagct gtggtataaa gaattc 86

<210> 48

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<401> 41

Met Arg Arg Glu Val Met Cys Ala Ala Lys Glu Glu Trp Lys Glu Arg

1

5

10

15

Thr Pro

<210> 49

<211> 87

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 49

caggaaagat ctatggacgg tgaagtgatg tgtggggcga aacaggaatg gaaggaacga 60
acgcatagg ccgcgtaata agaatto 87

<210> 50

<211> 87

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 50

caggaaagat ctatgtagcc caatgcactg ggagcacgcg tgtaggtct agaagccacg 60
taccattta atccataata agaatto 87

<210> 51

<211> 12

<212> PPT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 51

Met Leu Gly Leu Glu Ala Thr Tyr Pro Phe Asn Pro

1

5

10

<210> 50

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 52

Met Arg Gly Ala Asn

1

5

<210> 53

<211> 87

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 53

caggaaagat ctatgagggg cgcacaactaa gggggggggga aggtatttgt cccgtgcata 60
atctcgggtg ttgtctaata agaattc 87

<210> 54

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: N-terminal protective sequence

<400> 54

Xaa Pro Pro Xaa

1

<210> 55

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 55
tactatagat ctatnaccaa acacacaaaaa accgac 36

<210> 56
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 56
tataggtatt cagttgctca catgtctctt cctgac 36

<210> 57
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 57
aattcatact atagatctat gaccaaacag gaaaaaacgc c 41

<210> 58
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 58
tatataatac atgtcagaat togaggtttt caccgtcacc ac 42

<210> 59
<211> 96
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: randomized
oligonucleotide

<400> 59
tactatagat ctatgacaaa nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60

nnnnnnnnnn nnnnnccatag atctggttgc tgggat

95

<210> 60

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 60

atcacagcac gcagatctat g

21

<210> 61

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: randomized
oligonucleotide

<400> 61

tactatgaat tonnngaatt ctgccaccac tactat

36

<210> 62

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 62

atagtagtgg tggcagatt c

21

<210> 63

<211> 105

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: randomized
oligonucleotide

<400> 63

tactatagat ctatgcgcgc gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnn nccgcgcgtaa taagaattcg tacat 105

<210> 64
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 64
 atgtacgaat tcttattacg gagg

24

<210> 65
 <211> 90
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: randomized
 oligonucleotide

<400> 65
 tactatagat ctatgvanva nvanvanvan vanvanvanv anvanvanva nvanvanvan 60
 vanvantaat aagaattctc ccagcactat 90

<210> 66
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 66
 atagtgagg cagaattctt atta

24

<210> 67
 <211> 105
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: randomized
 oligonucleotide

<400> 67
 tactatagat ctatggaaga cgaagacnln nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
 nnnnnnnnnn nnnnnnctaa acptaaataa taagaattcg taact 105

<210> 68

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 68

atgtacgaat ttttattatt taagttaacg

30

<210> 69

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 69

agatctatgc cgcgcattct atggggcgaa gcgagaaagc gcttgtgggg tggggatcat 60
atacgcgcgt aataagaatt c 81

<210> 70

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 70

Met Pro Pro Ile Leu Trp Gly Glu Ala Arg Lys Arg Leu Trp Gly Gly
1 5 10 15

Asp His Thr Pro Pro
20

<210> 71

<211> 90

<212> DNA

<213> Artificial Sequence

<220>

(223) Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

(400) 71

agatctatgc cgcgcgcgtt gcatattgtt tcggctattg agcaggaggc gcatctgtgg 60
cgccgcctat ttaagaattc tcatgttga 91

(210) 72

(211) 27

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: stabilized
peptide

(400) 72

Met Pro Pro Leu Asp Ile Val Ser Gly Ile Glu Val Gly Gly His
1 5 10 15

Leu Trp Cys Arg Arg Ile Lys Asn Ser His Val
20 25

(210) 73

(211) 81

(212) DNA

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

(400) 73

agatctatgc cgcgcgacaa tcggctcttg tgatgaagcg gaggtcgacc aaggggatat 60
cagcgcgcgt aataagaatt c 81

(210) 74

(211) 8

(212) PRT

(213) Artificial Sequence

(220)

(223) Description of Artificial Sequence: stabilized
peptide

(400) 74

Met Pro Pro Asp Asn Pro Val Leu

1

F

<210> 75
 <211> 81
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: nucleic acid
 encoding stabilized peptide

<400> 75
 agatctatgc cgcgcctatt ggaaggagat gacaaataga tatatgcgtg gttgtttttc 60
 tptcgcgcgt aataagaatt c 81

<210> 76
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: stabilized
 peptide

<400> 76
 Met Pro Pro Leu Leu Asp Gly Asp Asp Lys
 1 5 10

<210> 77
 <211> 79
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: nucleic acid
 encoding stabilized peptide

<400> 77
 agatctatgc cgcgcaggtg gaagatgttg ataagacagt gacagatgag ttccattact 60
 ccgcgcgtaa taagaattc 79

<210> 78
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 75

Met Met Pro Arg Trp Lys Met Leu Ile Arg Gln
1 5 10

<210> 79

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 79

agatctatga tgagagttagc gcgcgcgtaa taagaattc 39

<210> 80

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 80

Met Met Arg Val Ala Pro Pro
1 5

<210> 81

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 81

agatctatgc cgcgcgttgcg cggggcatgc catctatatc gggtaaattc aatgtcttgc 60
gggcgcgcgt aataagaatt c 81

<210> 82

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 82

Met Pro Pro Leu Arg Gly Ala Cys Asp Val Tyr Gly Val Asn
1 5 10

<210> 83

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 83

agatctatgc cgcgggggag aggggaagcg gtgggagtga catgcttgag cgcgaacgtg 60
taccggcgt aataagaatt c 81

<210> 84

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 84

Met Pro Pro Gly Arg Gly Glu Ala Val Gly Val Thr Cys Leu Ser Ala
1 5 10 15

Asn Val Tyr Pro Pro
20

<210> 85

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 85

agatctatgc cgcggggaag gctagctctt tttgtccta tctttgtttc cgaatatgc 60
ctccggccgt aataagaatt c 81

<210> 86

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 86

Met Pro Pro Gly Arg Val Val Phe Phe Val Ala Ile Phe Val Ser Ala
1 5 10 15

Ile Cys Leu Pro Pro
20

<210> 87

<211> 81

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 87

agatctatgc cgcggaggtt cgtcatgag agtggttaaag ggtggggga cgttacaaaa 60
gtccggccgt aataagaatt c 81

<210> 88

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 88

Met Pro Pro Arg ILe Ala His Glu Ser Val Lys Gly Leu Gly Asp Val
1 5 10 15

Thr Lys Ala Pro Pro
20

<210> 89

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 89

agatctatgc atgacgaaca agaggaggag cacaataaaa aggataacga aadagaacac 60
taataagaat tc 72

<210> 90

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 90

Met His Asp Glu Glu Glu Glu Glu His Asn Lys Lys Asp Asn Glu Lys
1 5 10 15

Glu His

<210> 91

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 91

agatctatgc accaggagca cagagcaaggc aggatgcaca agggatcac gaataataag 60
aattctcatg ttgca 75

<21> 91

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 92

Met Gln Gln Glu His Glu Gln Gly Arg Met Ser Lys Arg Met Lys Asn
1 5 10 15

Asn Lys Asn Ser His Val
20

<210> 93

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 93

agatctatga accatcataa tgaggccatg atcaacacaa tgaaaacgag gaataataag 60
aattctcatg ttgca 75

<210> 94

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 94

Met Asn His His Asn Glu Ala Met Ile Asn Thr Met Lys Thr Arg Asn
1 5 10 15

Asn Lys Asn Ser His Val
20

<210> 95
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: nucleic acid
 encoding stabilized peptide

<400> 95
 agatctatga acgacgacaa tcagcaagag gataatcatg atcagcctaa ggataacaaa 60
 taataagaat tc 72

<210> 96
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: stabilized
 peptide

<400> 96
 Met Asn Asp Asp Asn Gln Gln Glu Asp Asn His Asp Gln His Lys Asp
 1 5 10 15

Asn Lys

<210> 97
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: nucleic acid
 encoding stabilized peptide

<400> 97
 agatctatga aagagcagga tcagcctaat gataaccatc acgaggataa acataagaag 60
 taataagaat tc 72

<210> 98
 <211> 18
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 98

Met Gln Glu Gln Asp Gln His Asn Asp Asn His His Glu Asp Lys His
1 5 10 15

Lys Lys

<210> 99

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 99

agatctatgg aagacgaaga cgagggtgcy tcagcgtggg gaggcagaact ttggctcgtgg 60
cagtcggtgc gtaaacgtaa ataataagaa ttc 93

<210> 100

<211> 25

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: stabilized peptide

<400> 100

Met Glu Asp Glu Asp Glu Gly Ala Ser Ala Trp Gly Ala Glu Leu Trp
1 5 10 15

Ser Trp Gln Ser Val Arg Lys Arg Lys
20 25

<210> 101

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<21> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 101

agatctatgg aagacgaaga cggctatagg atgggggggtg ggttgctcag gctcacttta 60
ttattcttcc gtaaacgtaa ataataagaa ttc 93

<210> 102

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 102

Met Glu Asp Glu Asp Gly Leu Gly Met Gly Gly Gly Leu Val Arg Leu
1 5 10 15

Thr Leu Leu Phe Phe Arg Lys Arg Lys
20 25

<210> 103

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding stabilized peptide

<400> 103

agatctatgg aagacgaaga cggggagagg atccaggggg cccgctgtcc agtagcgtg 60
gtagataaac gtaaacgtaa ataataagaa ttc 93

<210> 104

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized
peptide

<400> 104

Met Glu Asp Glu Asp Gly Glu Arg Ile Gln Gly Ala Arg Cys Pro Val
 1 5 10 15

Ala Leu Val Asp Arg Arg Lys Arg Lys
 20 25

<210> 105

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 105

Met Glu Asp Glu Asp Asp Arg Gly Arg Gly Arg
 1 5 10

<210> 106

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 106

agatctatgg aagaacgaaga cgacaggggg cgtggggcgtt agctttaagt tgcgctaagt 60
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<210> 107

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 107

agatctatgg aagaacgaaga cggggggggc gggaggaggg cctgtctttg ttccgcgctt 60
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<210> 108

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 108

Met Glu Asp Glu Asp Gly Gly Ala Gly Arg Arg Ala Cys Leu Cys Ser
1 5 10 15

Ala Leu Val Gly Glu Arg Lys Arg Lys
20 25

<210> 109

<211> 90

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid encoding stabilized peptide

<400> 109

agatctatgg aagacgaaga caagcgtcgc gagaggagtg caaaagggcg tcatgtcggc 60
cgtcgatgc gtaaactga ataagactgt 90

<210> 110

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: stabilized peptide

<400> 110

Met Glu Asp Glu Asp Lys Arg Arg Glu Arg Ser Ala Lys Gly Arg His
1 5 10 15

Val Gly Arg Ser Met Arg Lys Arg Lys
20 25